OREGON SECTION OF THE ASSOCIATION OF ENVIRONMENTAL & ENGINEERING GEOLOGISTS

October 2015

Volume 16, Number 2

The Official

# OREGON SECTION AEG NEWSLETTER

http://www.aegoregon.org

## State of DOGAMI Address

**Guest Speaker: Ian Madin**

DOGAMI has been in the news recently with reports about financial and administrative problems, including suggestions that the agency might be closed or merged with others. The facts are that DOGAMI experienced a complete management turnover in the first few months of 2015, and uncertainty about the financial situation required the agency to ask the legislature for additional funds to finish out the 2013-2015 budget period. The legislature approved an agency budget that provided improved financial stability, while also requiring significant restructuring of the Department's business practices. DOGAMI is now working hard to implement the changes required by the legislature, while continuing to seek new opportunities for developing tools and data to help Oregon plan for natural hazards and responsibly develop resources. There is a lot of work ahead, but the future is promising.

## Bio: Ian Madin, RG

PLEASE NOTE NEW RSVP EMAIL ADDRESS

Mr. Madin has a BA in Geology from UC Berkeley (1980) and an MS in Geology from Oregon State University (1986), where he studied active tectonics in the Pakistani Himalaya.

Mr. Madin joined the Oregon Department of Geology and Mineral Industries in 1987 as the Seismic Hazard Geologist for the State of Oregon, and served in that position until 1994 when he was transferred to the Baker City field office of DOGAMI. After 4 years in Baker City making geologic maps, Mr. Madin returned to the Portland office of DOGAMI as the geologic mapping team leader, and in 2004 became Chief Scientist for the agency. Since 2006 Ian has coordinated airborne lidar data collection throughout the state, and has coordinated over two dozen large multi-agency cooperative flights.

Ian's current research in Oregon includes geologic and geophysical investigations of potentially active faults, the development of detailed geologic models for improved hazard mapping, the use of remotely sensed data for geothermal exploration, and the use of lidar data for mapping geology and geologic hazards.

Since March of 2015, Ian has served as the Interim State Geologist for Oregon.

Ian is the DOGAMI representative on the Oregon State Seismic Policy Advisory Commission, and is member of the Seismological Society of America, the Earthquake Engineering Research Institute, the Geologic Society of America and is a Registered Professional Geologist.

**October Meeting Details**

**Tuesday, October 20th**

**Location: Old Market Pub**

**6959 SW Multnomah**

**Portland, Oregon**

**6:00 pm Social**

**6:45 pm Dinner**

**7:30 pm Presentation**

**Dinner: Pizza & Salad**

**$20 Dinner**
**Students FREE with RSVP**
**($5 if no RSVP)**

**Reservations:**

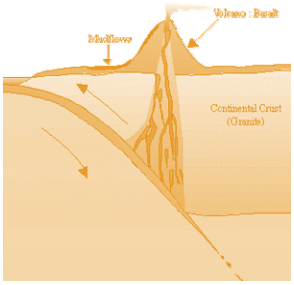
**RSVP@aegoregon.org**

**with "AEG Reservation" in the subject line by 4pm Thursday Oct. 15**

**There is a $2 surcharge for those who do not reserve by the deadline**

**Upcoming Meetings:**

| | | |
|---|---|---|
| Nov | 17th | TBD |
| Dec | 15th | George Freitag |
| Jan | 6th | AEG/ASCE Meeting |
| Feb | 16th | Rob Webb |
| Mar | 15th | TBD |
| Apr | 19th | Paul Santi |
| May | 17th | Jerry DeGraff and Student Poster Night |

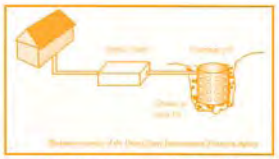



# Message from the Chair

As the days begin to get shorter, I hope that you are all making the most of this extended summer weather. Thanks to all those who attended the September meeting. It was a great turnout and so enjoyable to see many familiar faces, as well as a few new folks. A special thanks to Ben George (Cornforth Consultants) for his presentation on the rock slope assessment and mitigation near the Ross Powerhouse (Skagit Power Project, North Cascades National Park). In addition, big thanks to Katie Castelli (ODOT) and Michael Zimmerman (GRI) for leading our September field trip to learn about the geotechnical challenges of ODOT's Newberg-Dundee Bypass project. This was a perfect beginning to another exciting year of Oregon AEG meetings, events, and camaraderie.

In late September I was fortunate to attend AEG's 58th Annual Meeting in Pittsburgh. The meeting is being heralded as an overwhelming success, with nearly 500 attendees. While I didn't cross paths with many fellow Oregon Section members, I'm sure that many of you are saving your travel dollars for next year's annual meeting in Kona, Hawaii! In addition to the allure of the tropical venue, the Kona meeting is sure to have incredible field trips, short courses, and technical sessions. Whatever your motivation, it's going to be a great experience…so put it on your calendar!

My main agenda while in Pittsburgh was to represent the Oregon Section at AEG's Board of Directors (BOD) meeting. This was the highlight of my tenure on the Oregon Section Board thus far and it was a pleasure to be involved in the AEG's governance process. In my opinion, the two most the significant issues addressed by this year's BOD pertained to AEG's Professional Legislative Support Fund (PLSF) and the ongoing Governance Restructuring process.


Schematic of a Seepage Pit (Dry Well)

The PLSF was established a decade ago as a legislative "war chest" for such activities as lobbying and legal representation. The legislative activities supported by the fund could include responding to threats to professional geologist practice or licensure, as well as to support licensure efforts in the 20 non-ASBOG states. It is established that the PLSF is funded with $10 of each member's annual dues and by donations, though there was some debate regarding the level of fiscal cap for the fund. Through my involvement on the Licensure Committee over the past 5 years, I've come to understand that threats to licensure are ever-present and it would take a minimal number of lobbying or legal efforts to exhaust the fund if a relatively low cap was established. I believe that the PLSF is one of the foremost benefits of AEG, so I was pleased with the BOD resolution to establish a relatively high ($200,000) cap for the fund.

The forthcoming AEG governance restructure was another hot topic of the BOD meeting. I participated in a workshop involving review and editing of governance policies, as modified from the current Section Chair BOD model to the new Regional Director BOD model. In early to mid 2016, AEG's current "Sections" will become "Chapters", with several Chapters represented on the BOD by a single Regional Director. Our region will include Oregon, Washington, Idaho, Alaska, and Hawaii. I'm sure that most of us agree it's important that our historically prominent Section continues to be represented on the BOD, therefore it is critical we nominate strong Oregon Chapter candidates to serve the 3-year term as Regional Director.

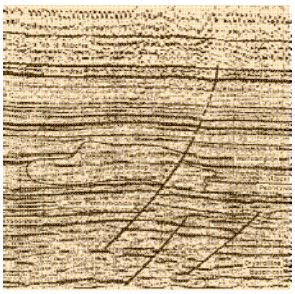
I look forward to seeing you on Tuesday, October 20th at the Old Market Pub when we welcome Ian Madin, Oregon's Interim State Geologist. Ian will be giving a "State of DOGAMI" update, as well as providing us with some interesting details about DOGAMI's current research.

See you soon,

Adam Reese, CEG
Oregon AEG Section Chair

*"Keen observation is at least as necessary as penetrating analysis"*

*Karl Terzaghi*



*"The earth is large and old enough to teach us modesty."*

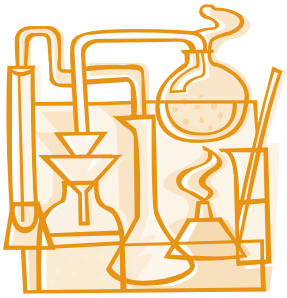
*Hans Cloos*

## Photo of the Month **Courtesy of Stephen Hay**

Katie Castelli (ODOT) and Michael Zimmerman (GRI) led an AEG field trip to the ODOT Newberg – Dundee Bypass Project on September 26th. The group visited five sites within the four mile alignment and were presented with a wide range of geotechnical and environmental topics. In the photo Michael is discussing geotechnical design elements at Bridge Structure #22009. This is the longest structure on the project and has 284, 24-inch diameter pipe piles. Each pile has an embedment of 80 to 90 feet. That equates to 4.7 miles of pile for this structure.

## Eulogy for Mike Long

We lost one of the top engineering geologists in Oregon on June 23, 2015. Mike Long had a long and successful career in Oregon. He worked for many years for the US Forest Service, as the geologist on several forests such as the Willamette National Forest. Then, he moved over to ODOT where he finished his career and retired in June of this year, just before passing away from cancer. In the 1990's he helped put together a three volume set of books on engineering geology as applied to the forests - an incredible set of books that I still use today. He held a couple of regional conferences for engineering geologists in the Pacific Northwest to help them understand engineering geology on forest lands. One was held at PSU, and I helped him organize this successful event. He was on the Oregon State Board of Geologist Examiners for at least one term.



When he moved to ODOT, he had many roles over the years moving up to Project Delivery Manager and finally Tech Center Manager for Region 2. When he retired, he had plans of moving to the Bahamas or Italy and spending more time with his family - the moves did not happen. There was no official obituary or announcement in the paper so what I have above is mostly from memory. He was a wonderful friend and a great engineering geologist, and he died way too young. We will miss him.

Scott Burns, PSU

# Debris Flow and Shallow Landslide Mitigation Workshop

Date: Thursday, October 29, 2015

Location: Portland State University
Business Accelerator Building
Mt. Hood Room
2828 SW Corbett Ave
Portland, OR 97201

Host: Tim Shevlin, Geobrugg North America, LLC, Regional Manager, Pacific Northwest US

Instructor: William F. Kane, PhD, PG, PE, Kane Geotech, Inc.

Cost: This workshop is free; however, registration is required to provide adequate supplies.

Registration: meredith.gray@geobrugg.com or 505.771.4080

Please forward this invitation to any professionals who may be interested.

Schedule: Check in 08:00 am – 08:30 am

Morning session 08:30 am – 12:00 pm (Complimentary beverages available)

Lunch 12:00 pm – 01:00 pm (Complimentary catered lunch)

Afternoon session 01:00 pm – 05:00 pm

**Course Information:**

This one-day course trains participants through lecture, case histories, and hands-on exercises. Principles covered:

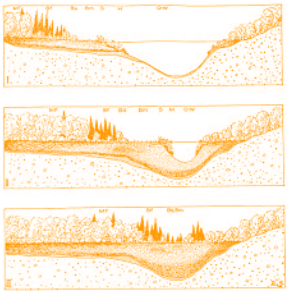


1. An overview of the basic forces of debris flows that result in erosion and/or debris flow channels
2. The basic theory behind a unique dimensioning software program
3. Use of the software program developed for dimensioning flexible debris flow barriers
4. Case studies working with the dimensioning program

This course is intended for consulting engineers, geologists, municipalities, public works, transportation agencies, as well as landscape architects and construction contractors specializing in geotechnical and hydrological applications. This course is recommended to anyone with an undergraduate level of understanding of geology and/or geotechnical engineering and some experience with basic natural hazard mitigation concepts; or a Bachelor's level education or higher in civil engineering, geotechnical engineering, geology, or related fields.

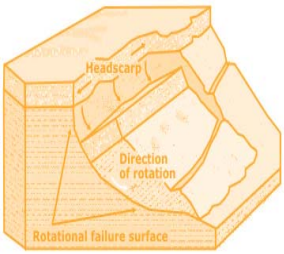
This course counts for 8 PDH (Professional Development Hour) units.

Dr. Kane received a BA degree (1975) in Geology from James Madison University and his MS (1981) and PhD (1985) degrees in civil engineering from Virginia Tech. In 1997 he founded KANE GeoTech, Inc. Dr. Kane is a registered PE (professional engineer) in 24 states and a registered PG (professional geologist) in Tennessee. He conducts engineering workshops in the U.S. and internationally. He has appeared as a geotechnical expert both in litigation and nationally on radio and television, including CNBC and CBS.



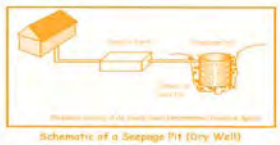
Dr. Kane has been designing, building, installing and monitoring geotechnical instrumentation systems since 1994. These completely automated systems are capable of recording groundwater levels, rates and directions of ground movement, locations of failure surfaces, rainfall quantities, and soil moisture.

Tim received a BS degree (2001) in environmental science from Allegheny College and his MS degree (2004) in engineering geology from Kent State University. He is a registered professional geologist in Pennsylvania and worked as a geotechnical designer for nationally known civil engineering firms before joining Geobrugg North America in 2009.




*"The earth is large and old enough to teach us modesty."*

*Hans Cloos*





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OREGON FIELD GUIDE

McMenamins KENNEDY SCHOOL

**The Cascadia 9.0 MegaQuake is coming. How will you prepare?**

Please join ASCE at the McMenamins Kennedy School Theater to view an hour-long documentary focusing on Oregon's earthquake preparedness, meet the engineers involved in the project, and get educated on how you can be ready for the Big One.

**Schedule:**

| | |
|---|---|
| Informational Fair | 6:00 pm |
| Theater Screening | 7:00 pm |
| Q&A Expert Panel | 8:00 pm |
| Door Prizes | 8:45 pm |

including 72-hour personal emergency kits

**Q&A Panel Members:**

| | |
|---|---|
| Bruce Johnson | ODOT |
| Ian Cannon | Multnomah County |
| Mike Stuhr | Portland Water Bureau |
| Yumei Wang | DOGAMI |
| Ed Quesenberry | Structural Engineer |
| Allison Pyrch | Geotechnical Engineer |

McMenamins Kennedy School
5736 NE 33rd Ave
Portland, OR 97211

www.asceor.org/event/unprepared/

Additional Sponsors/Participating in the Informational Fair:

American Red Cross · EZ · HARTCROWSER · SIMPSON Strong-Tie · Resilience Partners Northwest

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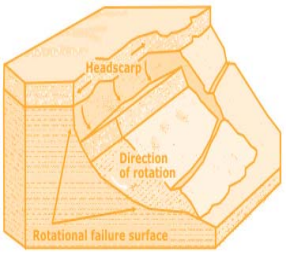
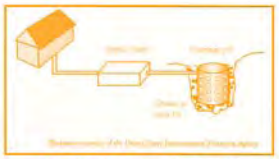




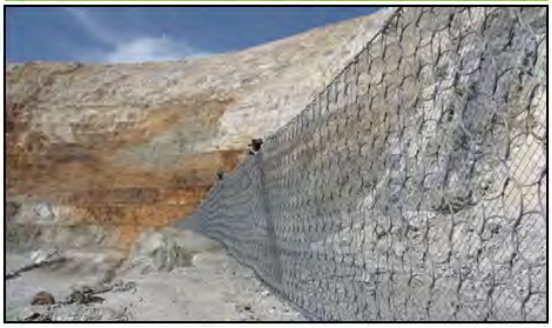




Schematic of a Seepage Pit (Dry Well)









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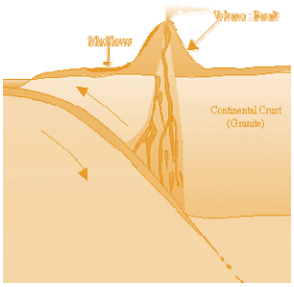




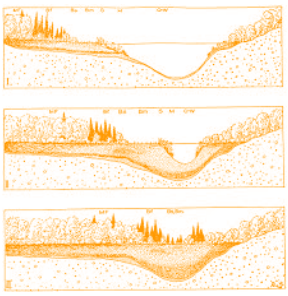

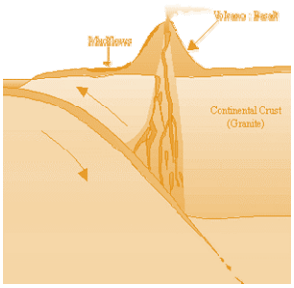




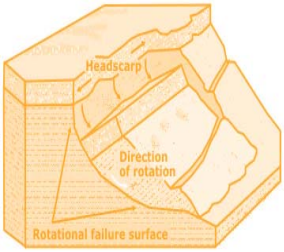



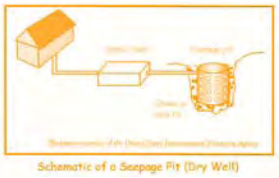
Schematic of a Seepage Pit (Dry Well)

## Thanks For Supporting AEG

Apex Companies, LLC

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GRI

NACSE

Oregon Department of Transportation

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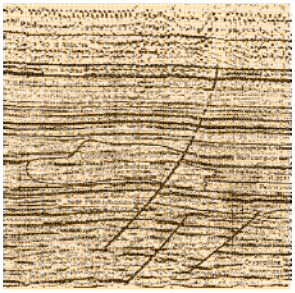

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